



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,931	03/08/2005	Richard Crumbach	266815US2PCT	7572
22850 7590 06/25/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER ABOAGYE, MICHAEL	
			ART UNIT 1725	PAPER NUMBER
			NOTIFICATION DATE 06/25/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/526,931	Applicant(s) CRUMBACH ET AL.	
	Examiner Michael Aboagye	Art Unit 1725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03/08/2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1725

DETAILED ACTION

Specification

1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1725

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sauer (US Patent No. 5,299,726) in view of Reul (US Patent No. 6,461,188).

Regarding claim 11, Sauer teaches a transparent pane (column 3, lines 62-68) comprising: at least one electroconducting (see, copper strip "5" figure 1; abstract, column 1, line 64-column 2, line 2; column 3, lines 40-45) non-transparent contact surface placed on a surface of the pane (opaque enamel, see column 2, lines 50-52), to connect it by soldering to copper strips i.e. connection piece (column 3, lines 39-45).

Regarding claim 13, Sauer teaches solder filler metal or brazing alloy ("4", figure 1) spread over contact surfaces (column 3, lines 36-45).

Regarding claims 14 and 15, Sauer teaches said connection piece ("copper strips "5", figure 1) providing deposits of soldering filler metal that are present in a form of droplets (spot soldered) or of a thin layer to solder the connecting piece (column 3, lines 42-47).

Regarding claim 16, Sauer teaches a multilayer system transparent to visible light applied between the glass sheets ("10 and 11", figure 2) and at least one electrically conducting layer ("13", figure 2) connected to the contact surface (column 3, lines 63-68).

Regarding claims 17 and 18, Sauer teaches using said multilayer system as a surface heater and as an antenna, which has an electrical contact (column 3, lines 1-9).

Regarding claims 19 and 20, Sauer teaches a system wherein at least the contact surface and the soldering location both being located on an inside of the

Art Unit: 1725

composite glazing panel (column 1, lines 6-11; column 3, lines 20-22 and figure 2), and an opaque coating that covers the contact surface and optically masks the contact surface (column 2, lines 50-55).

Sauer does not expressly teach a cut out made in the soldering region.

However Reul teaches a solderable electrical connection comprising a metal insertion piece (Reul, "6", figure 3), an electrical connection element (Reul, "1", figure 3), a support sheet ("2", figure 3), a metal conductor (Reul, "3", figure 3) and connection faces (Reul, "5 & 11", figure 3) and forming a solder joint portion by a solder deposit (Reul, "9", figure 3, and abstract); wherein a cutout or a window is provides at the soldering portion to serve as an observation window for simple visual inspection of the soldering point (Reul, column 2, lines 8-12).

It would have been obvious to one of ordinary skill in the art at the time the applicants invention was made to have provided a cutout or a window at the solderable contact portion of the transparent pane system of Sauer as taught by Reul to serve as an observation window for simple visual inspection of the soldering point (Reul, column 2, lines 8-12).

Response to Arguments

4. The examiner acknowledges the applicant's amendments received by USPTO on March 22, 2007. Claims 11-20 remain under consideration in the application.

5. Applicant's arguments filed March 22, 2007 have been fully considered but they are not persuasive. In response to applicant's argument the Sauer fails to teach at least one electroconducting, non-transparent contact surface placed on a surface of a pane to connect the pane by soldering it to a connection piece, and in a region of the soldering location. It is noted that Sauer specifically teaches an electroconductive opaque enamel layer connected by a low melting silver paste to the surface of glass sheet and then soldering copper conductive strips to the contact surface (note, opaque means nontransparent) (see, column 2, lines 46-63). (Note the examiner interprets the conductive strips as connecting pieces).

In response to applicant's argument that Reul fails to show certain features of the applicant's invention, i.e. placing an electroconducting surface in contact with a surface of a glass pane and connecting with connection pieces, it is noted that said limitations have been met by Sauer reference. It is further noted that Reul's reference is applied to make up for the deficiencies of Sauer's reference regarding the presence of a cutout or a viewing window at the contact portion for visual inspection of the soldering point. Finally, it is noted that the references cannot be considered individually in showing nonobviousness where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 1725

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Aboagye whose telephone number is 571-272-8165. The examiner can normally be reached on Mon - Fri 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1725

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JONATHAN JOHNSON
PRIMARY EXAMINER

AM
AM



Michael Aboagye
Assistant Examiner
Art unit 1725

06/01/2007